Message

From: Burian, Jonathan [Burian.Jonathan@epa.gov]

Sent: 5/1/2018 9:39:51 PM

To: Anderson, Milo [anderson.milo@epa.gov]

Subject: RE: Wisconsin Private Well Data

No worries. I think we should be good with just the municipal data for the excerise.

Jonathan Burian
Life Scientist/GIS Analyst
EPA, Water Division-Water Quality Branch
Region 5

Phone: 312-886-2916

Email: burian.jonathan@epa.gov

From: Anderson, Milo

Sent: Tuesday, May 01, 2018 4:30 PM

To: Burian, Jonathan < Burian. Jonathan@epa.gov>

Subject: Wisconsin Private Well Data

Jonathan,

Amy Inlenfeldt is the go to person at WDNR for private well data. She sent me private wells for Juneau, Adams, and Wood County for the Central Sands CAFO project, but that's just south of Marathon County where Wausau is located. Not straightforward, you need to get pre-1988 wells and 1988 or later wells from two different sources in the state. And the private well locations are often based on township-range-section location information, so all wells in a particular section will share the same point location in ArcGIS. Going for the pre-1988 data will get you by far the most wells, but there may have been a few more drilled 1988 or later.

I'm forwarding an email string for my private well data request back in 2016. I stripped off the Juneau, Adams, and Wood County well data attachment from Amy's email.

Milo

From: Ihlenfeldt, Amy B - DNR [mailto:Amy.lhlenfeldt@wisconsin.gov]

Sent: Tuesday, August 16, 2016 9:38 AM **To:** Anderson, Milo <anderson.milo@epa.gov>

Subject: RE: Could you rename the .zip as a .txt (or .doc or .zzz) and resend?

Here it is with .zzz

Let me know if you have questions about the data. GRN pulls in a lot of strange stuff from the various databases sometimes.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Amy Ihlenfeldt Phone: (608) 266-2955 amy.ihlenfeldt@wisconsin.gov From: Anderson, Milo [mailto:anderson.milo@epa.gov]

Sent: Tuesday, August 16, 2016 8:17 AM

To: Ihlenfeldt, Amy B - DNR

Subject: Could you rename the .zip as a .txt (or .doc or .zzz) and resend?

Thank you very much Amy, and seeing the time the email came in, I really appreciate the work you put into it.

Unfortunately, EPA's email server automatically strips off any attachments with a .zip extension, so could you please rename it with a different extension and resend. Please ignore any warnings you get by renaming with another extension, when I get the attachment, I can simply rename it back with the .zip extension and uncompress. Always works. Any of the 3 example extensions in the subject header will work.

Thanks again, and sorry I didn't foresee the need to warn you up front not to send as a .zip file.

Milo

312-886-6096

From: Ihlenfeldt, Amy B - DNR [mailto:Amy.lhlenfeldt@wisconsin.gov]

Sent: Monday, August 15, 2016 6:40 PM

To: Anderson, Milo <anderson.milo@epa.gov>
Subject: RE: Well Construction Data for Central Wis

Hi Milo:

I am attaching a shapefile of wells from our Groundwater Retrieval Network (GRN). I included a few attributes that might be useful. I also created a field called "Sensitive". These are all wells in our public water systems and all wells with high capacity well numbers. We ask people not to publish or share the well locations considered sensitive.

I also included a couple of fields that might require some explaining. DATA_OWNER is an indication of where the well record came from –GRN is pulling well data from several databases. The DATA_OWNER field tells you which data system added the well to GRN first, although the well may be in more than one database.

DWS – Drinking Water System (mainly public wells)

GEMS – landfill monitoring wells

GRN —well records added directly to GRN, often pre-1988 private wells where monitoring has been done for some reason.

LDES – wells coming in from Lab Data Entry System. Could be any type of well where we receive sample results before we have the well in another database.

SWAMP – WPDES permit (wastewater) monitoring wells

SWAP_IMAGE - pre-1988 wells where we have a scanned well construction report

WATR – Well and Test Results (well construction report database)

The WELL_USE field is GRN's attempt to determine the well use. GRN looks at what information there is about each well in the database it came from, and classifies the well use based on that information. It isn't a perfect system – there are many that GRN just calls "Various/Miscellaneous" when it can't determine a well use – but it might help you screen out some that you might not be interested in.

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Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Amy Ihlenfeldt
Phone: (608) 266-2955
amy.ihlenfeldt@wisconsin.gov

From: Anderson, Milo [mailto:anderson.milo@epa.gov]

Sent: Monday, August 15, 2016 2:46 PM

To: Ihlenfeldt, Amy B - DNR

Subject: RE: Well Construction Data for Central Wis

Thank you Amy.

Milo

From: Ihlenfeldt, Amy B - DNR [mailto:Amy.Ihlenfeldt@wisconsin.gov]

Sent: Monday, August 15, 2016 2:44 PM **To:** Anderson, Milo anderson.milo@epa.gov **Subject:** RE: Well Construction Data for Central Wis

Hi Milo:

Sorry I got a little swamped. It's true most pre-1988 wells have no information in our database except for the locations. We did go back and enter the pre-1988 public wells into the database but not any others.

It looks like Pete sent you the scanned well construction report pdf files. The only way to know what the well use is would be to go through one-by-one and look for well use information on those reports.

I'm not sure how often the WGNHS gets well layer updates, but I probably do have more recent post-1988 wells than what they have.

I'll work on getting that to you this afternoon.

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Amy Ihlenfeldt
Phone: (608) 266-2955

amy.ihlenfeldt@wisconsin.gov

From: Anderson, Milo [mailto:anderson.milo@epa.gov]

Sent: Monday, August 15, 2016 1:26 PM

To: Ihlenfeldt, Amy B - DNR **Cc:** Ihlenfeldt, Amy B - DNR

Subject: FW: Well Construction Data for Central Wis

Amy,

Could you please verify that WDNR would not be able to offer any distinction between water supply wells that are for drinking water vs. another water supply use for wells 1988 and older?

Thanks, Milo

From: Schoephoester, Peter [mailto:peter.schoephoester@wgnhs.uwex.edu]

Sent: Monday, August 15, 2016 11:14 AM

To: Anderson, Milo <anderson.milo@epa.gov>
Subject: RE: Well Construction Data for Central Wis

With the newer post-1988 data from the DNR, yes, but unfortunately not with these.

Pete.

From: Anderson, Milo [mailto:anderson.milo@epa.gov]

Sent: Monday, August 15, 2016 11:10 AM

To: Schoephoester, Peter < peter.schoephoester@wgnhs.uwex.edu>

Subject: RE: Well Construction Data for Central Wis

Is it possible to query out just those used as a potential drinking water source, leaving out those strictly for irrigation or industrial water supply?

From: Schoephoester, Peter [mailto:peter.schoephoester@wgnhs.uwex.edu]

Sent: Monday, August 15, 2016 11:05 AM

To: Anderson, Milo anderson.milo@epa.gov

Subject: RE: Well Construction Data for Central Wis

They are water supply wells, including both private and public, as well as irrigation and industrial water supply. They do not include boreholes not finished as wells, and do not including monitoring wells.

Pete.

From: Anderson, Milo [mailto:anderson.milo@epa.gov]

Sent: Monday, August 15, 2016 11:03 AM

To: Schoephoester, Peter < peter.schoephoester@wgnhs.uwex.edu>

Subject: RE: Well Construction Data for Central Wis

Peter,

Just to confirm, these are drinking water wells only, or do they represent all bore holes regardless of purpose? (I finished downloading).

Milo

From: Schoephoester, Peter [mailto:peter.schoephoester@wgnhs.uwex.edu]

Sent: Monday, August 15, 2016 7:58 AM

To: Anderson, Milo <anderson.milo@epa.gov> **Subject:** RE: Well Construction Data for Central Wis

Milo,

Here is the link to download the bundle of well construction report PDFs and a shapefile of their generalized point locations. Let me know if you have any questions.

https://uwmadison.box.com/s/dn4bbfrsm0zbmf3enc2ls8cmd4cltyer

Pete.

From: Schoephoester, Peter

Sent: Friday, August 12, 2016 4:25 PM

To: 'anderson.milo@epa.gov' <anderson.milo@epa.gov> **Subject:** Well Construction Data for Central Wis

Hi Milo,

I compiled the data and am uploading in now, but it will be a little while before it is all ready for you (700 GB). On Monday I'll send a link for the download.

Thanks,

Pete.

Peter Schoephoester Information Manager Wisconsin Geological Survey University of Wisconsin - Extension peter.schoephoester@wgnhs.uwex.edu 608-262-2320

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